



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:

Applicant: Richard A. Craig, and Anthony J. Peurrung.

S. N.: 09/771,064

Filed: 01/26/2001

For: METHOD AND APPARATUS FOR THE DETECTION OF HYDROGENOUS MATERIALS.

) Art Unit: 3641

) Examiner: Rick Palabrica

) Paper No: NA

) Confirmation No: 2684

) Our Ref. No: E-1825 CIP

) Date: 12/19/2002

Box Non-Fee Amendment
Commissioner of Patents
Washington, DC 20231

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GROUP 3600

Dear Sir:

In response to the Office Action mailed 11/29/02, the Applicant submits the following remarks in reference to the Examiner's Notice of Restriction/Election.

RESTRICTION/ELECTION

1. The Examiner has indicated the Applicant did not elect a single species of the neutron source, neutron sensor and neutron shield material, contrary to the requirements of the 8/27/02 Office Action, sections 4, 5, and 6, respectively. In order to properly address the species election requirement for the neutron source, the Examiner has stated that the Applicant must specifically identify which one member of the group listed in claim 8 is being elected for examination.

In response to the Examiner's restriction to a single member of the neutron source group listed in claim 8, the Applicant elects with traverse the fission source. ✓

However, the Applicant believes the restriction requirement is improper at least for the reasons stated in MPEP §803.02:

"If the members of the Markush group are sufficiently few in number or so closely related that a search and examination of the entire claim can be made without serious burden, the examiner must examine all the members of the Markush group in the claim on the merits, even though they are directed to independent and distinct inventions." (emphasis added).

The group listed in claim 8 meets the criteria per MPEP §803.02. Specifically, the members of the group are sufficiently few in number (i.e., 3 listed members) that they do not constitute a serious burden on the examiner. Further, they are closely related by virtue of the specific property sought, e.g., as alternative sources for generating neutrons in the instant invention. Per MPEP §803.02, the Markush grouping of claim 8 is therefore proper and the examiner "must examine all the members of the Markush group in the claim on the merits even though they are directed to independent and distinct inventions." The Applicant respectfully requests reconsideration of the restriction requirement per 37 CFR §1.143 and examination of the claim on the merits.

In claim 12, the Examiner has, in like manner, indicated the Applicant did not elect a single species of the neutron sensor. In response to the Examiner's restriction requirement to a single member of the Markush group listed in claim 12, the Applicant provisionally elects with traverse the ³He gas-proportional counter. ✓

However, as stated hereinabove, the Applicant asserts the restriction requirement is improper in view of MPEP §803.02 because the cited group members are closely related by virtue of the purpose sought and claimed in the instant invention, e.g., to determine neutrons. As such, the claimed members represent a proper Markush grouping. The

Applicant respectfully requests reconsideration of the restriction requirement per 37 CFR §1.143 and an examination of claim 12 on the merits.

In claim 13, the Examiner has also required an election of a single species of neutron shield. The Applicant provisionally elects with traverse the shield comprising ¹⁰B. Again, in view of MPEP §803.02, the Applicant asserts the restriction requirement to a single species in claim 12 is improper. The grouping in the instant claim cites at most 2 group members, and combinations thereof, which constitutes a group of sufficiently few numbers that a search and examination of the entire claim elements can be made without serious burden. Further, the cited members are closely related by function as neutron shields. In short, because the members of the claim meet the criteria defined in MPEP 803.02, the claim is a proper Markush grouping. The Applicant respectfully requests reconsideration of the restriction requirement per 37 CFR §1.143 and examination of claim 13 on the merits.

2. The Examiner has also required the Applicant to list all claims readable on the elected species, per the requirement in Section 8 of the previous Office action. As stated in the MPEP §806.04(e): "Claims are never species....Species are always the specifically different **embodiments**." (emphasis added).

In view of MPEP §806.04(e), the Applicant provides the following list of claims with respect to the different embodiments in response to the Examiner's requirement.

In the present application, claims 1-4, 8, 12, 13, 14 and 15 are generic. Claim 9 reads on the species embodiment of fission-source provisionally elected in Claim 8. Claims 5-9 and 11 read on the species embodiment of ³He gas-proportional counter enumerated, and provisionally elected, from claim 12.

Per 37 CFR 1.146, the Applicant understands that because no generic Group I claim has yet been held to be unpatentable, all Group I claims (1-15) remain in the application pending review on the merits.

CLOSURE

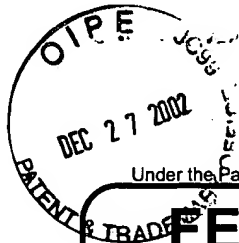
Applicant has made an earnest attempt to respond in a proper manner to the Examiner's requested actions in this case. Should the Examiner identify any further requirements, he is invited to contact the undersigned for resolution thereof. Applicant respectfully requests that a timely movement toward Allowance be made in this case.

Respectfully submitted,



Stephen R. May
Reg. No. 29,255

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FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) 0.00

Complete if Known

Application Number	09/771,064
Filing Date	01/26/2001
First Named Inventor	Craig, et al.
Examiner Name	Rick Palabrica
Group Art Unit	3641
Attorney Docket No.	E-1825 CIP

METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number: 02-1275
Deposit Account Name: Battelle Memorial Institute

☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☒ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101	740	201 370	Utility filing fee	
106	330	206 165	Design filing fee	
107	510	207 255	Plant filing fee	
108	740	208 370	Reissue filing fee	
114	160	214 80	Provisional filing fee	

SUBTOTAL (1) (\$) 370.00

2. EXTRA CLAIM FEES

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =	X	
Independent Claims	-3** =	X	
Multiple Dependent			

	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103	18 203 9		Claims in excess of 20
102	84 202 42		Independent claims in excess of 3
104	280 204 140		Multiple dependent claim, if not paid
109	84 209 42		** Reissue independent claims over original patent
110	18 210 9		** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Fee Code	Large Entity (\$)	Small Entity (\$)	Fee Description	Fee Paid
105	130	205 65	Surcharge - late filing fee or oath	
127	50	227 25	Surcharge - late provisional filing fee or cover sheet	
139	130	139 130	Non-English specification	
147	2,520	147 2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112 920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115	110	215 55	Extension for reply within first month	
116	400	216 200	Extension for reply within second month	
117	920	217 460	Extension for reply within third month	
118	1,440	218 720	Extension for reply within fourth month	
128	1,960	228 980	Extension for reply within fifth month	
119	320	219 160	Notice of Appeal	
120	320	220 160	Filing a brief in support of an appeal	
121	280	221 140	Request for oral hearing	
138	1,510	138 1,510	Petition to institute a public use proceeding	
140	110	240 55	Petition to revive - unavoidable	
141	1,280	241 640	Petition to revive - unintentional	
142	1,280	242 640	Utility issue fee (or reissue)	
143	460	243 230	Design issue fee	
144	620	244 310	Plant issue fee	
122	130	122 130	Petitions to the Commissioner	
123	50	123 50	Processing fee under 37 CFR 1.17(q)	
126	180	126 180	Submission of Information Disclosure Stmt	
581	40	581 40	Recording each patent assignment per property (times number of properties)	
146	740	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279 370	Request for Continued Examination (RCE)	
169	900	169 900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

Name (Print/Type)	Stephen R. May	Registration No. (Attorney/Agent)	29,255	Telephone	(509) 375-2387
Signature	<i>Stephen R. May</i>	Date	19 Dec 2002		

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3641

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CERTIFICATE OF MAILING

BOX Non-Fee Amendment
Commissioner for Patents
Washington, DC 20231

Dear Sir:

The undersigned hereby certifies that the attached:

- ☒ Notice to Office Action mailed 11/29/2002
- ☒ Fee Sheet (2 ea.)
- ☒ Return Receipt Postcard

are being deposited with the United States Postal Service as:

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in an envelope addressed to Box NONFEE Amendment, Commissioner for Patents,
Washington, DC 20231, on the date set forth below.Rebecca B. Rupp
SignatureDecember 20, 2002
Date DepositedRebecca B. Rupp K1-53
Intellectual Property Services
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